

Annexes to the International Preliminary Report on Patentability

CLAIMS

1. (Amended) A light-emitting device (100) comprising a semiconductor
excitation light source (102) emitting blue-violet light and a solid material illuminant
5 (105) having an absorbent (103) for said blue-violet light containing Sm, wherein
said solid material illuminant (105) absorbs blue-violet light with said
semiconductor excitation light source (102) by Sm contained in the absorbent (103) and
radiates light by inner shell transition of Sm.
- 10 2. The light-emitting device (100) according to claim 1, wherein
said blue-violet light has a peak wavelength in the range of 398 to 412 nm.
3. The light-emitting device (100) according to claim 2, wherein
said semiconductor excitation light source (102) emitting blue-violet light is a
15 semiconductor laser device having an active layer of an InGaN semiconductor.
4. The light-emitting device (100) according to claim 1, wherein
said solid material illuminant (105) contains Sc, Y or a typical element as cations,
and contains at least one of N, O and S as anions.
- 20 5. The light-emitting device (100) according to claim 4, wherein
said solid material illuminant (105) contains both N and O as anions.
6. The light-emitting device (100) according to claim 4, wherein
25 said solid material illuminant (105) contains at least one of nitrides of Ga, In and
Al.
7. The light-emitting device (100) according to claim 4, wherein

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said solid material illuminant (105) contains at least one of oxides of Y, Si, Al and Zn.

5 8. The light-emitting device (100) according to claim 1, wherein
said solid material illuminant (105) contains a red phosphor having a peak wavelength in the range of 600 to 670 nm, a green phosphor having a peak wavelength in the range of 500 to 550 nm and a blue phosphor having a peak wavelength in the range of 450 to 480 nm.

10 9. The light-emitting device (100) according to claim 8, wherein
said red phosphor, said green phosphor and said blue phosphor contain rare earth elements.

15 10. The light-emitting device (100) according to claim 8, wherein
said red phosphor contains at least either Sm or Eu.